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EUROPEAN PATENT APPLICATION

Int. Cl.⁴: **G 11 C 17/00**, **H 01 L 27/10**,
H 01 L 21/76

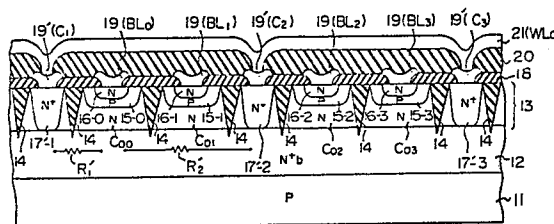
②② Date of filing: 05.08.82

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57) A junction short-circuiting-type programmable read-only memory (PROM) device comprises a plurality of striped buried layers (12) with a plurality of striped collector regions (13) on them. A plurality of base regions (15-0 to 15-5) are arranged in a row, with one in each of the collector regions, and, in addition, an emitter region (16-0 to 16-5) is arranged in each base region. Further, in each of the collector regions, a plurality of high impurity regions (17'-1 to 17'-3) of the same conductivity type as that of the collector region are formed to connect the collector region to the word lines and each base region is connected to a bit line. One of the high impurity regions are provided for each two base regions which avoids variations in the separation of the memory cells and the collector connections and consequent variations in the write-in current, and, in addition, decreases the resistance between the emitter and collector so that the area of the memory cells can be reduced with a consequent increase in the integration density of the memory device.





European Patent
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EUROPEAN SEARCH REPORT

0072209

Application number

EP 82 30 4139

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
D, X	PATENTS ABSTRACTS OF JAPAN, vol. 4, no. 87 (E-16)[569], 21st June 1980; & JP - A - 55 55561 (HITACHI SEISAKUSHO K.K.) 23-04-1980 * Abstract; figures 1-4 *	1, 4, 5	G 11 C 17/00 H 01 L 27/10 H 01 L 21/76
A	--- PATENTS ABSTRACTS OF JAPAN, vol. 4, no. 137 (E-27)[619], 25th September 1980; & JP - A - 55 91164 (FUJITSU K.K.) 10-07-1980 * Abstract; figure 2E *	2, 3	
A	--- PATENTS ABSTRACTS OF JAPAN, vol. 4, no. 83 (E-15)[565], 14th June 1980; & JP - A - 55 52256 (NIPPON DENKI K.K.) 16-04-1980 * Abstract; figures 4, 5 *	1, 4, 5	
			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			H 01 L G 11 C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 10-10-1985	Examiner MORVAN D.F.D.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	